

Marked-up Amended Claims:

1. (Twice Amended) A method for generating a dump file, the method comprising:
  - a. generating a dump file that does not include all operating system data by gathering at least:
    - i. thread information for at least one running thread,
    - ii. context information for the thread,
    - iii. callstack information for the thread,
    - iv. process information for a process in which the thread is running, and
    - v. information identifying a reason for generating the dump file; and
  - b. storing the dump file to a storage medium.
20. (Twice Amended) A computer-readable medium having computer-executable instructions for causing at least one processor to perform acts comprising:
  - gathering dump file information that does not include all operating system data but does include [including] at least thread information for at least one running thread, context information for the thread, callstack information for the thread, process information for the process in which the thread is running, and information identifying a reason for generating the dump file; and generating a dump file using the dump file information.

- 1 39. (Twice Amended) An apparatus comprising;  
2 memory;  
3 a data storage drive configured to write data files to at least one data  
4 storage medium; and  
5 at least one processor operatively coupled to the memory and the data  
6 storage drive and configured to:  
7 a. generate a dump file that does not include all operating system  
8 data by gathering in the memory at least:  
9 i. thread information for at least one running thread,  
10 ii. context information for the thread,  
11 iii. callstack information for the thread,  
12 iv. process information for the process in which the thread is  
13 running, and  
14 v. information identifying a reason for generating the dump  
15 file; and  
16 b. store the dump file to the storage medium.
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1 REMARKS

2 Claims 1, 20 and 39 have been amended to further clarify that which is  
3 being claimed.

4 Claims 76 and 77, which the Examiner previously withdrew as being  
5 directed towards a non-elected invention, have been canceled without prejudice to  
6 expedite allowance of the remaining pending claims.

7 Claims 1-57 and 67-75 are pending.

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9 Rejections under 35 U.S.C. § 103(a):

10 Claims 1-12, 14-31, 32-50, 52-57 and 67-75 stand rejected under 35 U.S.C.  
11 § 103(a) as being unpatentable over U.S. Patent No. 6,430,707 issued to *Matthews*  
12 *et al.*

13 The Applicants respectfully traverse these rejections for at least the  
14 following reasons.

15 *Matthews et al.* disclose a system wherein a dump image is transferred from  
16 a client device to a server device over a network when the client device fails. The  
17 dump image that is transmitted to the server device includes the contents of  
18 memory, including the operating system, the code, the stack, threads, registers,  
19 and local and global variables that can be analyzed at a source level. See, e.g.,  
20 column 2, lines 27-34. This is a classical system dump, which is large and  
21 cumbersome and time-consuming to transfer and analyze. Indeed, *Matthews et*  
22 *al.* distinctly point out that the resulting image can be processed by a standard  
23 debugging tool such as ICAT. That is because the resulting image is a classical  
24 system dump.  
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1       What *Matthews et al.* do present is one way to perform such a system dump  
2 in a client device that doesn't have the ability to store the large resulting dump  
3 image locally. Thus, *Matthews et al.* teach that the dump image can be transferred  
4 to the server by using a separately running process and packet-based  
5 communication capability.

6       To the contrary the pending claims are directed towards dump files that are  
7 not classical system dumps, which, for example, (and expressly recited/stated) do  
8 not include all of the operating system data.

9       Furthermore, the novel dump file that is generated includes information  
10 identifying a reason for generating the dump file. It should be noted that the  
11 Office Action failed to adequately address this recited claim limitation. One  
12 reason is that *Matthews et al.* do not disclose or otherwise even suggest that such  
13 identifying information be included in the dump image. Instead, *Matthews et al.*  
14 list various exemplary failures that might lead to their dump image being created,  
15 but no identifying reason is itself included in their dump image.

16       Hence, *Matthews et al.* neither disclose nor reasonably suggest such a novel  
17 dump file and do not include information identifying a reason for generating their  
18 dump image in their dump image itself, for example, as recited in independent  
19 **Claims 1, 20 or 39.**

20       For at least these reasons Claims 1, 20 and 39 are clearly patentable over  
21 *Matthews et al.*, as are applicable dependent **Claims 2-12, 14-19, 21-31, 32-38,**  
22 **40-50, 52-57 and 67-75.**

23       It is respectfully requested that the rejections be reconsidered and  
24 withdrawn.  
25

1 **Rejections under 35 U.S.C. § 103(a):**

2 Claims 13, 32 and 51 stand rejected under 35 U.S.C. § 103(a) as being  
3 unpatentable over *Matthews et al.* in view of U.S. Patent No. 5,603,033 issued to  
4 *Joannin*.

5 The Applicants respectfully traverse these rejections for at least the reasons  
6 stated above and also the following reasons.

7 *Joannin* discloses a tool for debugging an operating system. Here,  
8 *Joannin* employs a typical process for analyzing a post-mortem dump file by  
9 restoring the dump file data to memory and processing it accordingly. This is a  
10 fairly conventional process.

11 One of the limitations in Claims 13, 32 and 51, that *Matthews et al.* and/or  
12 *Joannin* fail to disclose and/or reasonably suggest is the minidump file that is  
13 substantially and patentably different than conventional system dump images/files.  
14 Note, as described above, the resulting minidump file is produced from the dump  
15 file recited in the independent claims, which expressly does not include all  
16 operating system data as do conventional system dumps. Hence, the name  
17 “minidump”.

18 Thus, *Matthews et al.* and/or *Joannin* do not disclose nor reasonably  
19 suggest, either alone or in combination, such a novel minidump file, especially one  
20 that includes information identifying a reason for generating the minidump file but  
21 not all operating system data, as recited in independent **Claims 13, 32 and/or 51**.

22 For at least these reasons Claims 13, 32 and 51 are clearly patentable over  
23 *Matthews et al.* and *Joannin*.

24 It is respectfully requested that the rejections be reconsidered and  
25 withdrawn.

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2 **Conclusion**

3 The pending claims are patentable over the recited art. It is respectfully  
4 requested that the claims be allowed and a patent promptly issued.  
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6 Respectfully Submitted,

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